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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/632,248	08/03/2000	Wolfgang Maus	E-41007	1144

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EXAMINER

TRAN, HIEN THI

ART UNIT	PAPER NUMBER
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1764

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DATE MAILED: 02/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/632,248

Applicant(s)

MAUS, WOLFGANG

Examiner

Hien Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 August 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to because in Figs. 1-5 it is unclear as to how the mat 8 is related to the insulating mat 6. Correction is required.
3. The drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the drawings to comply with CFR 1.84(p)(5), e.g. they should include the reference sign(s) mentioned in the specification and vice versa.

Specification

4. The disclosure is objected to because of the following informalities:
On page 14, line 1 it is unclear as to how the mat 8 is related to insulating mat 6.
Appropriate correction is required.
5. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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7. Claims 4-5, 16-17 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the limitation of “long ceramic fibers” is nowhere disclosed in the specification of the priority document.

8. Claims 4-5, 16-17 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, it is unclear as to what is intended by “long ceramic fibers” and how long the fibers must be to be considered “long ceramic fibers”.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-11, 14-17, 19-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 8-10 it is unclear as to what is intended by “... at a remaining said inner region”.

In claim 2, the language of the claim is directed to method of making which renders the claim vague and indefinite as it is unclear as to what structural limitation applicant is attempting to recite. See claims 8, 14, 20 likewise.

In claim 3, line 3 “low” is a relative term and therefore is vague and indefinite. See claim 15 likewise.

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In claim 4, line 2 “long” is a relative term and therefore is vague and indefinite. See claims 5, 16-17 likewise.

In claim 6, line 3 “adjacent cavities” has no clear antecedent basis.

In claim 19, line 1 “1” should be changed to --12--.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

12. Claims 1-3, 7-8, 12-15, 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Locker et al (6,077,483).

With respect to claims 1-2, 7-8, 12-14, 19-20, Locker et al discloses a catalytic exhaust gas purification device comprising:

a steel casing 16;

a monolithic ceramic honeycomb element 10 mounted in said casing 16;

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a compensating layer disposed between said casing 16 and said honeycomb element 10;
said compensating layer comprising:

a swelling mat or intumescent mat 14 with border regions at risk from abrasion;

an insulating layer 12 having a border and an inner region; said border of said
insulating layer 12 having a thicker region 12A than said inner region; and

said swelling mat 14 being disposed adjacent a side of said inner region of said
insulating layer 12 facing away from said honeycomb element 10 and said thicker region
12A of said border of said insulating layer 12 covering said border regions of said
swelling mat 14 at risk from abrasion (Fig. 2).

With respect to claims 3, 15, Locker et al discloses that the insulating layer contains
ceramic material (col. 4, lines 15-40).

Instant claims 1-3, 7-8, 12-15, 19-20 structurally read on the apparatus of Locker et al.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a person
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the
manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459
(1966), that are applied for establishing a background for determining obviousness under 35
U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. The art area applicable to the instant invention is that of catalytic converter.

One of ordinary skill in this art is considered to have at least a B.S. degree, with additional education in the field and at least 5 years practical experience working in the art; is aware of the state of the art as shown by the references of record, to include those cited by applicants and the examiner (*ESSO Research & Engineering V Kahn & Co*, 183 USPQ 582 1974) and who is presumed to know something about the art apart from what references alone teach (*In re Bode*, 193 USPQ 12, (16) CCPA 1977); and who is motivated by economics to depart from the prior art to reduce costs consistent with the desired product characteristics. *In re Clinton* 188 USPQ 365, 367 (CCPA 1976) and *In re Thompson* 192 USPQ 275, 277 (CCPA 1976).

16. Claims 4-5, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Locker et al (6,077,483) in view of Merry (4,929,429).

Since it is unclear as to what structural limitation applicant is attempting to recite as set forth above, as best understood, the apparatus of Locker et al is substantially the same as that of the instant claims, but fails to disclose whether the insulating mat may contain long ceramic fibers.

However, Merry discloses the conventionality of providing insulating mat containing long ceramic fibers.

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It would have been obvious to one having ordinary skill in the art to substitute for the long ceramic fibers of Merry for the ceramic fibers of Locker et al for the known and expected results of obtaining the same results in the absence of unexpected results.

17. Claims 6 and 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Locker et al (6,077,483) in view of Ten Eyck (4,999,168).

Since it is unclear as to what structural limitation applicant is attempting to recite as set forth above, as best understood, the apparatus of Locker et al is substantially the same as that of the instant claims, but fails to disclose whether the swelling mat may swell upon absorbing water.

However, Ten Eyck discloses the conventionality of providing a swelling mat containing mica as that of the instant invention and therefore inherently swells upon absorbing water (col. 5, lines 40-44).

It would have been obvious to one having ordinary skill in the art to alternatively select an appropriate material for the swelling mat, such as mica, as taught by Ten Eyck in the apparatus of Locker et al on the basis of its suitability for the intended use as a matter of obvious design choice to obtain the desired supporting and insulating the catalyst element thereof, absence showing any unexpected results and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In *re Leshin*, 125 USPQ 416.

18. Claims 9-11, 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Locker et al (6,077,483) in view of Santiago et al (4,344,922) and Ten Eyck (4,999,168).

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The apparatus of Locker et al is substantially the same as that of the instant claims, but fails to disclose whether the compensating layer may be prefabricated segments.

However, Santiago et al and Ten Eyck disclose the conventionality of providing a compensating layer in form of prefabricated segment.

It would have been obvious to one having ordinary skill in the art to use the compensating layer in prefabricated segment form as taught by Santiago et al and Ten Eyck in the apparatus of Locker et al, on the basis of its suitability for the intended use as a matter of obvious design choice to obtain the desired supporting the catalyst element thereof, absence showing any unexpected results.


Conclusion

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien Tran whose telephone number is 308-4253. The examiner can normally be reached on Tuesday-Friday from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (703) 308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0661.

HT
February 12, 2003


Hien Tran
Primary Examiner
Art Unit 1764